

Application No. 10/660,626
Amendment dated January 3, 2006
Reply to Office Action of October 3, 2005

Docket No.: 0941-0840P

REMARKS

Claims 1-57 remain present in this application.

Rejection under 35 USC 102

Claims 1-3, 7, 10-13, 20-23, 27 and 29 stand rejected under 35 USC 102(b) as being anticipated by Hwang, U.S. Patent 6,204,080. This rejection is respectfully traversed.

It is respectfully submitted that Hwang fails to teach or suggest performing hydrogen treatment on silicon layer, as is required in the present application.

Claims 1, 10, and 20 recite providing a first sacrificial layer having a first silicon material, performing a hydrogen treatment on the first sacrificial layer to form a hydrogenated surface thereon, and forming a second sacrificial layer having a second silicon material on the hydrogenated surface of the first sacrificial layer. It is therefore clear that the former silicon layer is treated with hydrogen to form a hydrogenated surface thereof to improve deposition of the latter silicon layer thereon, avoiding peeling therebetween (see page 11, lines 5-8 of the specification, for example).

Nevertheless, Hwang teaches using bromine fluoride vapor or xenon fluoride vapor to remove the sacrificial layers (see column 13, lines 43-46). Clearly, Hwang fails to disclose using a hydrogen treatment to modify the silicon layer surface.

It is therefore respectfully submitted that the prior art utilized by the Examiner fails to disclose all of the limitations of independent claims 1, 10, and 20, and therefore fails to teach or suggest the method of independent claims 1, 10 and 20, as well as their dependent claims. Reconsideration and withdrawal of the 35 USC 102(b) rejection are respectfully requested.

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Rejections under 35 USC 103

Claims 4-6, 9, 14-17, 19 and 24-26 stand rejected under 35 USC 103 as being unpatentable over Hwang in view of Nguyen et al., U.S. Publication 2005/0014361. This rejection is respectfully traversed.

Claims 8 and 28 stand rejected under 35 USC 103 as being unpatentable over Hwang in view of Chinn et al., U.S. Publication 2004/0033639. This rejection is respectfully traversed.

Claims 30-35, 42-49, 56 and 57 stand rejected under 35 USC 103 as being unpatentable over Huibers et al., U.S. Patent 6,741,383 in view of Hwang. This rejection is respectfully traversed.

Claims 36-39 and 50-53 stand rejected under 35 USC 103 as being unpatentable over Huibers et al. in view of Nguyen et al. This rejection is respectfully traversed.

Claims 40 and 54 stand rejected under 35 USC 103 as being unpatentable over Huibers et al. in view of Hwang. This rejection is respectfully traversed.

The Examiner admits that Huibers et al. does not disclose "performing a hydrogen treatment on the first sacrificial silicon layer to form an H-treated silicon surface thereon", in page 5, lines 18-20 of the Office Action.

As the 103 rejection also relies on Hwang, it also fails to teach the limitation "performing a hydrogen treatment on the silicon layer to form an H-treated silicon surface thereon" of claims 30 and 44. Accordingly, it fails to establish a *prima facie* case of obviousness in that the prior art reference does not teach or suggest all of the claim limitations.

Accordingly, Applicant respectfully submits that the cited references fail to disclose or render obvious the feature of the above-discussed present invention as set forth in claims 30 and

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44. It is therefore applicant's belief that claims 30 and 44 are allowable over the cited references. Insofar as claims 31-35, 42-43, 45-49, 56, and 57 depend from claims 30 and 44, respectively, it is applicant's belief that the claims are also allowable.

It is therefore respectfully submitted that the prior art utilized by the Examiner fails to disclose all of the limitations of independent claims 30 and 44, and therefore fails to teach or suggest the method of independent claims 30 and 44, as well as their dependent claims. Reconsideration and withdrawal of this portion of the 35 USC 103 rejections are respectfully requested.

With regard to the remaining references involving claims dependent upon independent claims 1, 10 and 20, as discussed above, the prior art utilized by the Examiner fails to disclose all of the limitations of independent claims 1, 10, and 20, and therefore fails to teach or suggest the method of independent claims 1, 10 and 20, as well as their dependent claims. Reconsideration and withdrawal of this portion of the 35 USC 103 rejections are respectfully requested.

Conclusion

Favorable reconsideration and an early Notice of Allowance are earnestly solicited.

In the event that any outstanding matters remain in this application, the Examiner is invited to contact the undersigned at (703) 205-8000 in the Washington, D.C. area.

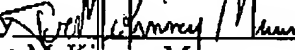
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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Dated: January 3, 2006

Respectfully submitted,

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